

## **In Support of Collection Assessment: The Role of Automation in the Acquisitions and Serials Departments**

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### **INTRODUCTION**

Mark Grover has defined collection assessment as "the systematic evaluation of the size, appropriateness, and usefulness of a library or collection in terms of the goals, patrons, and programs of the sponsoring organization."<sup>1</sup> Virtually every publication on this topic acknowledges the valuable, yet time-consuming, nature of formal collection assessment. Martin Faigel has indicated that "the basic premise underlying all assessments are that they will:

1. gather data for better collection development decisions;
2. assess how well the collections meet the needs of present and future users;
3. allow us to see if the directives of a collection development policy are being carried out;
4. review the performance of current selectors; and
5. reduce the subjectivity that is inherent in the selection process."<sup>2</sup>

Most collection managers are well-acquainted with their collections and have little trouble selecting material for the collection. Until recently, collection assessment has been viewed as a peripheral activity which received attention only when hard data was required to justify some collection activity such as accreditation reports.

In a presentation at the 1987 Charleston Conference, Joseph Barker identified three shaping forces in store for most acquisitions librarians in the 13 years leading to the year 2001: the rise of collection management, constraining forces from budgets, and the ramifications and potential of automation. Barker illustrates his point with his experiences at the University of California, Berkeley. In the early 70s, collection development at Berkeley moved out of the Acquisition Department. "When this happened, the role of acquisitions was clearly separated from collection development, and each function was able to develop independently. Acquisitions was free to become a more focused, centralized service, specializing in *how* to acquire, with all *what* decisions (i.e., selections) clearly outside its boundaries."<sup>3</sup> At the same time, materials budgets began to decline from the highs experienced in the 50s and 60s. The first automated system was introduced at Berkeley in the same time period.

Barker identified four implications of these changes for the acquisitions department. "First, we are inextricably tied to vendor services, and especially to selection support such as approval

plans. Second, acquisitions is inextricably linked to automation (its own automated system and vendors' automation, plus online catalogs, online utilities, and new bigger databases and directories of publishers, wholesalers, and publications). Third, since collection managers will be doing more with less, they will call upon acquisitions to be even more accurate and to do even more comprehensive preorder and followup work. And fourth, everyone will continue to look everywhere for ways to cut staff even further." <sup>4</sup>

## **AUTOMATED ACQUISITIONS SYSTEMS**

Although the intention of this paper is to focus on automation support from the acquisition department *other* than from automated acquisitions systems, a discussion of this kind cannot skip this topic entirely. The management information function of the acquisitions system is a fundamental support mechanism for collection assessment. In 1992, virtually all existing acquisitions systems can provide acquisitions and accounting data, vendor performance data, average prices, projected expenditures, current encumbrances, and expenditures by type of acquisition such as gift or exchange. Increasingly, users of library systems are calling for the correlation of data on circulation, acquisitions, interlibrary lending and borrowing, and search behavior to assist in making informed collection assessment and management decisions. For example, the OhioLINK Project linking 18 state-assisted universities in Ohio devoted an entire section of its RFP to collection management requirements.

Despite their abundant statistics and ability to quickly quantify data, local automated systems do not always yield the information needed. Standard reports designed by the systems vendor may be rigid, inflexible and unsuitable for the purpose at hand. It may still be necessary to develop statistics, particularly comparative statistics, manually. As a result, collection management must look beyond traditional sources of information and develop non-traditional opportunities.

## **NON-TRADITIONAL OPPORTUNITIES**

For the past several years, much has been written about the promise of expert systems to automate routine tasks and free staff for higher level responsibilities. Specifically, the concept of a scholar's or bibliographer's workstation has appeared regularly in the library literature on collection management. In 1992, it would appear that real progress is being made in development and testing of functional systems. Development of a scholar's workstation can progress in two directions. The direction which is seeing the greatest progress at this time is a workstation that provides seamless, transparent access to a number of tools which support the acquisition and collection management process. The second direction includes an expert system which guides a novice or non-specialist to the same decisions that an expert would make. In the first scenario, the system provides the tools to the user but he has to know the questions to ask, how to use each database, and the user must know how to request the appropriate information. Contrast this with a second scenario in which these linkages are automatic and the expert system intuitively makes the connection for the user or at least poses questions such as "Are funds available in the chemistry budget?"

Librarians are somewhat guilty (and I admit to being one of them) of expounding on what future systems will provide seamlessly and transparently without the slightest thought as to how

this would be accomplished. Philip J. Smith, associate professor of industrial and systems engineering and head of the Cognitive Sciences Engineering Laboratory at The Ohio State University, is a well-known expert in the field of interface design and expert systems. In a recent e-mail message, he clarified the current status of the expert system world.

First, it's important to recognize that to date most attempts to replace an expert with a stand alone computer based on knowledge-based systems have not experienced the widespread success and usage in fields like medicine that was predicted in the 1970's. In the medical community, for instance, the term expert system is now viewed with great skepticism. Unless the task is very well defined and very repetitive, it's unreasonable to think of replacing the expert. A more feasible approach is to think of developing a system that assists the expert, improving efficiency, reducing errors, etc. Such cooperative problem solving systems are the latest wave to try to overcome the deficiencies of expert systems.

As for updating knowledge bases: If the relevant knowledge changes, the rules have to be updated. This can be very expensive. DEC, for example, spends \$2 million a year to update the knowledge base for one of their more successful systems which configures computer systems.<sup>5</sup>

Let's explore some of the speculation and wishful thinking that has occurred as well as real products which can facilitate collection assessment. Fred Lynden discusses a special workstation which would make it possible "to receive a faculty request via electronic mail, consider its suitability by checking the collection policy, search the item in a local online catalog, read a review, verify its availability, and send requests electronically to the Acquisition Department or directly to a vendor."<sup>6</sup>

In a presentation at the ALA Annual Conference in Atlanta, GA, in 1991, John Corbin discusses an online consideration file that includes reviews, search and verification results, LC MARC records with classification, and inventory availability from vendor files. The system could also communicate via e-mail with requestors as to the status of orders and should be able to append status codes as they make decisions. Corbin suggests that selectors should be able to select ordering source and let the software take over from there. In effect, he predicts the demise of the acquisition department but that is definitely beyond the scope of this presentation! Specifically, Corbin argues for an electronic mail system and electronic bulletin board linking processing staff, collection managers and users.<sup>7</sup>

Carol Chamberlain's vision exploits linkages to external databases. Evidence of new publishing trends and material availability would come from the Bowker "in-print" products. Access to a vendor's inventory would enable the acquisition department to determine the availability of a title and expedite delivery. Better budget management also would accrue due to the ability to predict more accurately fulfillment rates for orders. Cooperative acquisition decisions and resource sharing would be enhanced by access to holdings in other libraries.<sup>8</sup>

Within the institutional environment, Chamberlain sees linkages to administrative files including data on enrollment, research grants, data on faculty productivity, program descriptions, number of faculty, degrees granted, rate at which funds were expended the previous year, fulfillment rate, average prices, comparison figures from the publishing industry, requests for special purchases, requests for purchase based on circulation or ILL activity or critical collection needs. Specifically, "the budget planner could review the characteristics of an academic program in engineering, note the growth of research and course work in robotics, compare the previous year's acquisitions and expenditures in that discipline, and review purchase requests and collection needs to support robotics. These factors could be weighed against publishing output and average prices in the subject area. An informed decision could then be made on the level of financial support for robotics for the next year . . ."<sup>9</sup>

But are there any realities on the horizon behind these visions? Indeed, there are. The first fits into the category of a workstation that provides seamless, transparent access to a number of collection management tools. The second represents a true expert system which contains expert knowledge to guide a novice or non-specialist to the same decisions that an expert would make. The first project is known as The Bibliographer's Workstation developed by the Southwest Missouri State University Library. This HyperCard based package is designed to facilitate selection of materials by faculty members and librarians. The database contains four main categories of information germane to selection. In the bibliographic category is the online catalog of the library, its serials list, and information on the collection of the Center for Research Libraries. The critical and contextual section includes *BIP PLUS with Reviews*, collection development guidelines, the ACRL standards and the campus planning policy. The financial component contains information on average prices for monographs and serials, the higher education price index, and the library's departmental funding allocations. Blackwell North America's New Titles Online product serves as the commercial segment. The data is all interconnected and can be accessed "directly, within an 'acquisitions decision making' framework' or in a format designed for individual academic departments."<sup>10</sup>

In a forthcoming article in *Library Acquisitions: Practice & Theory*, John Meador, one of the developers of this system, provides an excellent example of how the workstation actually functions in dynamic terms. "The initial process of identification/verification would utilize the Bibliographic Data set in the Workstation. Moving through the link to the Library's OP AC, you might find that the Library held a copy, but that it currently was in circulation. One also could, through the Workstation's link to the Internet, examine holdings of other institutions for that or a related title. To ascertain need for an additional copy . . . , one could utilize within the Critical & Contextual set tools such as BIP+ to examine reviews of [the] . . . book, and, if necessary, consult . . . the Library's *Collection Development Guidelines* to measure the appropriateness of the title for that or any other discipline. The selection process would in part require the use of Financial Data, in this case, the current fund balance .... If there were sufficient funds available, one could then pass to the initial stage of the Acquisitions process utilizing Commercial Data to determine price, etc., all within the literal confines of the Workstation or through electronic pathways to connected databases."<sup>11</sup>

A second system, Selection Advisor, was developed in Australia by Mark Johnston and John Weckert. The system uses six categories of selection criteria in priority order: subject, intellectual content, potential use, relation to collection, bibliographic considerations, and language. The system poses questions such as "'Does it directly support programs or institutional emphases?' and 'Is it a major field of scholarship?'"<sup>12</sup> To better understand the concept of such a system, let's discuss how the system moves through its questions to a final recommendation. Each question has a label for storage in the system and a specific question to be asked. When the question is asked and answered, the response is stored in the system. The system asks all the questions in a particular category and totals the scores. If the score is above or below a certain number, the system moves to a different set of questions. This process continues until all appropriate questions have been asked, at which point the final calculation is made and a recommendation given. The developers of this system indicate that "the system . . . will not solve all selection problems, but perhaps it will add some consistency to the activity and, by forcing those using it to think carefully about the selection process, aid in wise decision making. There are two other positive attributes that have been noted by librarians. One is its use in training librarians in this field of their discipline, and the other is the ease of storing information on all previous

decisions made, both for works accepted and for those rejected."<sup>13</sup>

These systems represent the initial efforts to bring our vision out of the clouds and into the practical realities of our daily environments. In this regard, the acquisitions and serials departments play a major role in supplying the tools that form the bedrock of such expert or decision-support systems. Many of those tools exist already. What remains to be done is the development of the seamless, transparent interfaces and the decision/knowledge structures to present the options in a meaningful manner.

## **NON-TRADITIONAL PRODUCTS AND OPPORTUNITIES**

### **Vendor Services**

In his review of the future of acquisitions and collection development, Joe Barker confirms our reliance on technical support from vendors.

Another challenging problem will be to work with vendors to retain the technical support they furnish acquisitions and collection development. Clearly a significant element of library automation resides in vendors' computers. It would be expensive for us to lose this and foolhardy for us not to take advantage of it.<sup>14</sup>

Vendors provide a range of services to customers including hand-held terminals for order transmission, sophisticated PC-based systems for acquisitions and serials control, reporting capabilities, and online linkages to the vendor's database. For example, Blackwell's New Titles Online database (NTO) will soon include BNA Table of Contents data added to MARC cataloging records along with title abstracts. The product will soon be accessible on the Internet and will include online access to scholarly British titles. In addition at ALA Midwinter in 1992, B.H. Blackwell introduced CONNECT, its online access to Blackwell's Periodicals and Standing Order databases.

Let's turn our attention to a number of vendor services which are now commonly available in the acquisitions and serials departments of our libraries.

### **BIP Plus**

*BIP Plus* is a CD-ROM database for the popular Bowker series of books in print titles in a single database with greatly enhanced search-ability. The primary advantage of the PLUS system from a collection assessment perspective is its searchability. For the collection manager, searches can be structured to retrieve all titles published by a particular publisher in a specific time period. At Ohio State, this type of search has been used to evaluate the effectiveness of the approval program in identifying titles in a particular subject area for which a publisher is known to publish extensively. Specifically, we have used this search to evaluate the success of our Baker & Taylor approval program in delivering Fairchild publications for the Human Ecology Library. In other searches, collection managers have searched specific subject areas qualified by date to determine this year's publications in a particular field. In one case this information was used in support of a program proposal to reflect what level of resources would be needed to acquire comprehensively in the area of biotechnology in the current year (for domestic titles only).

## B&T Link

*B&T Link* is a similar product to *BIP Plus*, but differs significantly in its focus on the resources identified and available through a specific vendor. This difference from *BIP Plus*-the ability to determine the availability of a particular title in the stock at Baker & Taylor-is invaluable for the acquisitions department.

In late fall 1991, Baker and Taylor Books announced the release of a new world edition of this product called *B&T Link: The Title Source* expected in April 1992. This CD-ROM product is one of the results of B&T's "purchase of a minority interest in Book Data Ltd., a U.K. bibliographic and marketing information service for publishers, librarians and booksellers, . . ." <sup>15</sup> This new product will include information on 1.6 million American, British, Canadian and European English-language titles both in-print and forthcoming. In addition, the U.S. and U.K. editions of the same title will be listed together. In addition to the Baker & Taylor version of this product, Book Data will have its own version available called *Bookfind*. Unlike *B&T Link* it provides expanded records for mostly non-fiction titles that include annotations, descriptions, tables of contents and academic affiliation of the author. <sup>16</sup>

The value of this product for collection assessment is similar to that of *BIP Plus*. However, the inventory module is an advantage for a library using Baker & Taylor as a primary vendor or as an approval plan vendor. By expanding the database to include European and British titles, the library can purchase a single CD-ROM database for broad coverage instead of a series of CD-ROM products focused on in-print titles in specific countries. The ability to search a single database with one search, the access to inventory data, and the correlation of U.S. and U.K. editions makes this a significantly improved product over the standard *BIP Plus*.

## Serials Services

As the largest serials vendors in the academic market, the databases of EBSCO and Faxon reflect years of experience in the serials acquisitions business. Faxon's Datalinx system and EBSCO's EBSCONET are similar products which allow libraries to connect to the vendors' serials databases. These databases are continually updated and represent the working files of the vendor. Although these vendor databases have some utility for collection assessment, Boss and McQueen are most accurate in their assessment that "the listings reflect the working environment of a subscription agency rather than the bibliographic approach of library files. The files include inactive records, records for material suspended or delayed, cross-reference records, and multiple records for single titles . . ." <sup>17</sup> This extraneous information is of sufficient volume to pose serious limitations to the direct use of these systems for collection managers. Reports generated from these databases by the vendor on demand (and purged of this extraneous data) continue to serve valuable collection assessment purposes such as analysis of country of origin. However, as local acquisitions and serials control systems mature and are modified, institution-specific reports may more appropriately be generated from local systems.

As a result, additional products geared toward the serials market have been developed. Specifically, two competing products: EBSCO's *Serials Directory* and Bowker's *Ulrich's Plus*, both CD-ROM based products, have added a new dimension to this area. Generally, these two products include bibliographic information with subscription data such as publisher name and address, phone and fax numbers, price and journal circulation data. The EBSCO product also includes the CONSER MARC record for each title which can be downloaded into an ASCII format

for local manipulation and loading into automated systems. However, CONSER records are not searchable directly but can be displayed only when the record is retrieved from a routine search.

Both systems support keyword searching with Boolean operators, right truncation, wildcard characters, word adjacency, and proximity searching. Searches can be qualified by publisher, frequency, language, and country of publication. The EBSCO product also permits limiting to the titles to which a library subscribes. The local titles option causes the library's titles to be highlighted in displays. However, the system learns the local titles by having them keyed in directly and marked or those on order with EBSCO can be loaded by floppy disk." An excellent comparative evaluation of these two products appears in an article by Peter Jasco in volume 20, no. 1 of *The Serials Librarian* entitled "Coverage and Accessibility in Ulrich's Plus and EBSCO-CD." Jasco provides extensive discussion of access points and retrieval from the two databases. <sup>19</sup>

Competition between these products will undoubtedly result in improvements. Both publishers continue to add new features as a result of user requests and in response to the strides made by their competitors. For collection assessment, the more subject headings which are assigned, the better the chance of retrieving the title. However, as a consequence, the retrieval of irrelevant titles also increases. Specifically, "librarians who are responsible for collection development may also want to limit a subject search to serials within a given range of circulation figure and/or price, published since a given year or period, by a specific publisher and/or abstracted/indexed by particular A/I services."<sup>20</sup> Jasco has summarized well the current state of these technologies.

CD-ROM technology offers enormous potential for serials acquisitions, collection development and information retrieval in general, but only if access points not available in printed directories are made complete, consistent and reliable in these CD-ROM directories.<sup>21</sup>

## **BookQuest/SerialsQuest**

*BookQuest* and *SerialsQuest* are relatively new services from ABACIS, Inc., a part of the Faxon Company. According to the User's Manual for these services, "the purpose of the *BookQuest* database is to effectively serve a rapidly growing network of participating dealers, collectors, and librarians, who want to quickly and efficiently buy, sell, and trade rare and out-of-print books and other print items (excepting serials). The purpose of the *SerialsQuest* database is to provide the same service for back or missing issues, volumes, and runs of periodicals."<sup>22</sup> In addition, a paper version of titles wanted is sent to dealers without access to the database via computer.

The services can be searched interactively online to see if a particular title is available or the library can upload listings of needed items to the database for electronic matching with items for sell. If specific information is needed on a particular title or if a collection manager is interested in searching the database under a particular subject to locate what titles are available, searching online is appropriate. However, if a list of titles is needed it is more cost-effective to create the list offline, upload it to the database, allow the system to match overnight and report its results via electronic mail the next morning.<sup>23</sup>

From a collection assessment perspective, these services are most useful through direct searching. For example using *BookQuest*, a special collections curator in American Fiction could query the system in several ways to determine the availability of items relevant to his collection. Searching for the availability of a known item could be accomplished by the collection manager or

the acquisitions department. Additionally, the collection manager could search the entire database through the keyword subjects to locate material available. By reviewing the records of material available, the collection manager could evaluate titles and their condition before proceeding with an order. Finally, the system allows searching by a strategy called "List Authors in Database." Again, the special collections curator in American Fiction would be able to review the entire list of authors reflected in the database at once instead of keying in each individual listing. Finally, using the Interest/Specialty field, the collection manager could locate dealers in a given subject specialty and pull up a collection of records loaded by that dealer.

On the *SerialsQuest* side, the system could be used as the final stage of a collection assessment project evaluating serials holdings. Missing issues or entire backruns of titles could be searched directly to determine availability. For regular use of either service, the collection manager can employ a field called "earliest database entry to consider" as a means of limiting searches. For example, if the collection manager's last search was on March 8, 1991, entering that date in this field will retrieve only me records uploaded since that date.

### **Automated Bookman**

A formidable competitor with the *BookQuest* product is a system developed by the journal, *AB Bookman's Weekly*. The intention of this system is to accommodate the growing number of dealers with computerized databases as well as those dealers and quoters without computers.<sup>24</sup> Each issue of *AB Bookman's Weekly* publishes want lists of over 10,000 books needed. Each week the journal matches all the want lists advertised against the computerized inventories of the dealers who subscribe to the service. On publication of the issue, the dealers are notified of all books that match titles being sought. The subscription fee is \$118 per year plus \$1 per match. It is then up to the dealer to contact the person seeking the book. The dealer pays the \$1 fee for notification of the match regardless of whether the quote results in a sale or not.

For the non-computerized user, any advertiser in the publication's classified sections may have his ads matched with the computerized lists for two consecutive weeks. The advertiser can also use the service by paying a one-time startup charge of \$10 and \$1 per match; the \$118 subscription fee is waived. This service adheres to AB's longstanding policy of denying access to individual collectors.<sup>25</sup> *BookQuest* allows access by individual collectors.

This product can be used in the same manner by collection managers as the *BookQuest* product. However, the success of these services will depend on the loyalty and allegiance of the book dealers who subscribe to them. Libraries will not see the utility of these services until they are embraced by the bookselling communities so that the time involved in uploading want lists results in significantly improved acquisition of needed out-of-print material. A useful research project would be a similar analysis of these two products much like the Jacso evaluation of *Ulrich's Plus* and the *Serials Directory*.

### **Online Review and Selection of Approval Books**

Online review and selection of approval books is an outgrowth of the prevalence of online catalogs. It is only natural that libraries would seek to expand the information provided by the online system and to improve what had been essentially a manual process. Southwest Missouri State University Library was one of the first libraries to work with their vendor to provide this



information online. BNA and NOTIS developed a program to load new title information into a separate file in the public access catalog. The file is searchable by author, title, profile descriptor, and LC classification. Terminals are available in academic departments and faculty can scan the titles and make selections online. Forms are still sent but this enables ALL faculty to see ALL titles and is particularly valuable for interdisciplinary fields. Once a purchase decision is made, the record becomes an in-process bibliographic record. New tapes are loaded biweekly and the previous files are archived. "The archival records can then be used in various ways for analyzing information such as price studies, departmental selection trends, etc."<sup>26</sup>

In a recent message on ACQNET, Lee Bennett of Loyola University in Chicago describes a service from Academic Book Center that automates their Open Order List. Previously this printed list of 3000+ titles was used to avoid duplication of firm orders by searching the list during the pre-order process. ABC can provide the list on diskette for load into a PC searchable by title, ISBN, LCCN and LC class. The second application allows Loyola to load the database into the MDAS (Multiple Date-base Access System) on NOTIS as a separate file from the regular bibliographic database. Using the second method, the acquisitions department is able to search the file using standard NOTIS search commands and to transfer records from the file into the catalog file upon receipt of the weekly approval books. Using the MDAS system, the file can be closed to the public. A new file can be loaded each month erasing the previous file. The file is accessible from all authorized NOTIS terminals including those in collection management.<sup>27</sup>

In a corollary to online review and selection of approval titles, libraries have used Blackwell North America's retrospective tapes to do collection assessment. At the University of Houston in the early 1980s, such a project was undertaken to compare the OCLC cataloging tapes for the library against the approval tapes for the recent past profiled to reflect what the library would have purchased if more materials funds had been available. This matching process identified approval titles that BNA would have sent against the profile eliminating those titles cataloged on OCLC. This process reveals the titles that the library might have purchased but limits the retrieval to those titles which appear not to have been retrieved through alternative purchasing. Houston identified only two failings of this process: the failure of the system to eliminate alternative editions of the same title, and the failure of the system to account for receipt of titles in series. In addition, "B/NA can also provide full LC MARC records in machine readable tape format for titles ordered. This arrangement, a relatively new offering, eliminates the need to input individually ordered titles into a library's online database."<sup>28</sup>

Auburn University engaged in such a program with BNA in the late 1980s. The purpose of their program was to study and correct collection problems in four areas: Southern history, aviation history, crime and criminology, and public administration. "... bibliographers were able to determine how the collection in Southern history, considered a library strength, compared to current publication trends and what percentage of Southern history titles available from B/NA on approval were in the collection. . . . Other benefits include: the provision of subject analyses of specific sections of the collection, comparisons of library acquisition patterns against publication statistics, and subject strengthening by acquisition. Moreover, use of the slips allows for the inclusion or exclusion of materials by readership level, or by categories, such as: items issued by certain publishers, textbooks, and titles in series, and several other categories."<sup>29</sup>

## **OCLC Collection Analysis CD**

In 1989, Martin Dillon and Collette Male of OCLC heralded the appearance of a new

product specifically designed to support collection assessment. Marketed by AMIGOS Bibliographic Council, OCLC's Collection Analysis CD was the " . . . first stand-alone tool designed specifically to address the information needs of the collection manager. [This product] automates the labor-intensive process of collecting data for statistical measures. Using a subset of a library's collection as represented in OCLC's records, [the CD] performs title-by-title comparisons between a library's collection and those of its peer institutions."<sup>30</sup>

The system draws together data on academic peer groups based on collection size and program support. The statistical evaluation takes into account the aggregate titles held by the peers and the group's average. This allows users "to gauge their strengths and practices against a de facto standard for collections of a given type."<sup>31</sup> The system comes with 14 peer groups. Within collection size, subdivisions are provided based on program support such as whether graduate degrees are offered. In addition to the 14 peer groups, the user can order a custom peer group of up to 99 OCLC institutions. The system shows the distribution of titles within holdings ranges, such as number of titles held by 90-100% of the peer group.

The database includes 1.7 million monographs published within a recent 10 year time span. To be included a title must be a monograph; be in print format; have dates within a ten-year time frame; have 050 or 090 LC classification in the record; be held by at least one ARL or academic library. Government documents, dissertations and theses are excluded. The first database covered 1977-1987. Each annual update adds a new year and eliminates the oldest year. This two-year lag is built in to allow for cataloging backlogs.

Statistics which are automatically calculated include:

1. counts of number of titles and number of holdings in the peer group; number held by evaluator and overlap counts.
2. comparisons based on evaluator-to-average peer group member and % of call number range in collection.
3. gross counts and % of overlap.
4. number of titles within holdings ranges.
5. number of gap titles within holdings range.
6. number of titles held only by one member of the peer group.

The system can also provide title specific information. Lists can be generated by LC class number and modified by language, date of publication, and holdings threshold.<sup>32</sup>

Such analysis has a number of advantages for collection managers. Easy access to empirical data is no small achievement. Such data can be used for fund allocation, grant applications, participation in the National Shelflist Count and the Conspectus, accreditation, evaluating past practice, and creating collection policies.<sup>33</sup> For a consortial group, such data can "provide new insights into the total available resources of a resource-sharing group, . . . can highlight previously undetected strengths in collections"<sup>34</sup> and can facilitate the development of cooperative programs and policies. In the local library, collection managers can use the data as a validity check to determine if actual holdings in particular subjects match the collection policies.<sup>35</sup>

Collection managers can generate a list of titles that are unique to their institution; a list of titles that only one peer owns; and subject lists of titles held by the peer group. "Using the various filters, for instance, a manager may produce a bibliography of titles on Russian History, and may specify that the titles be in English, be published within a two-year span, and be held by at least forty percent of his or her peers."<sup>36</sup>

However, as with any of the assessment tools discussed thus far, there are limitations. Areas that present long-standing problems in bibliographic control can skew the results of collection analysis. These include areas such as serials, government publications, non-book materials; unclassified collections; and cataloging backlogs. In such a scenario, computer analysis is still useful as long as the parameters are carefully drawn.

## **AUTOMATED ACCESS TO COLLECTION DEVELOPMENT POLICIES AND PRICE INDICES**

For true integration of price indices and collection policies into the daily life of collection managers, this information must be maintained online and accessible with other collection assessment tools. Fred Lynden identifies several uses of computers for collection assessment including collection development policies and conspectuses in machine-readable form. In specific application, the collection development policy at Brown includes a user manual describing policies and procedures such as how to order a book. The second part is a tabular representation of instructional and research needs (both current and desired) for each department. The policy can be updated online and downloaded in segments to the collection managers.<sup>37</sup>

The literature is filled with admonitions concerning the use of published price indices for projecting costs for a specific library. These indices "show national price trends which may differ from a specific library's price trends in two ways. The scope of an individual library's collection may differ from the scope of titles included in a national index, and this different selection of titles may affect the results. Then, too, the actual price paid by a library may differ from the annual subscription price recorded for the national indexes, and consequently the library's average price may differ from the national average price."<sup>31</sup> However, the Ohio State University experience with an indexing process that uses national data and overall price indices has not disadvantaged the library. As a result, inclusion of this information in machine-readable form and accessible to collection managers can be a fundamental component of collection assessment.

## **CONCLUSION**

The purpose of this presentation was to identify the role of automation in the acquisitions and serials departments in support of collection assessment. I think we have seen that a growing number of tools and services are available to facilitate not only the acquisitions process, but to improve our skills and abilities in analyzing our collections as they relate to the curriculum and research activities of the institution. Regardless of how proficient we become at analyzing, we will always be struggling to anticipate the needs of users.

Who among us has NOT heard Richard Rowe speak about the "just in time" versus the "just in case" approach to collections? Despite the growing number of services and tools available to us for collection assessment, our focus must begin turning toward information access agendas. I'd like to close with a citation from an article by Sharon Bonk and Heather Miller. Librarians must begin

... to urge collection policy makers to consider, incorporate and begin planning for a very different set of

services for and demands from faculty, students, researchers. The labor intensive work being done on collection analysis via the RLG conspectus is valuable, as it will describe the locus of print collections of national importance, prevent unintentional duplication, and reduce the need for intentional duplication in order to build collections in other areas .... However, resource sharing of printed materials in discrete collections is not the ultimate solution to problems of limited resource budgets. Along with fine tuning of interlibrary lending and borrowing, it will be but one of the many sources/tools in the future options for information 'acquisition' and delivery systems.<sup>39</sup>

## NOTES

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